

WHAT IS CLAIMED IS:

1. A heat-sensitive lithographic printing plate precursor having on a support (1) an ink-receptive layer comprising an oleophilic organic high molecular compound and (2) a water-receptive layer easily allowing removal by a fountain solution or a printing ink when heated, which are arranged in this order: said water-receptive layer being a layer formed using a coating solution comprising a solvent capable of dissolving the organic high molecular compound of the ink-receptive layer in a proportion of 1 to 40 weight % of the total solvents in the coating solution.

2. The heat-sensitive lithographic printing plate precursor as in claim 1, wherein the water-receptive layer comprises a hydrophilic resin and a colloid of oxide or hydroxide of at least one element selected from the group consisting of beryllium, magnesium, aluminum, silicon, titanium, boron, germanium, tin, zirconium, iron, vanadium, antimony and transition metals.

3. The heat-sensitive lithographic printing plate precursor as in claim 2, wherein the hydrophilic resin is contained in a proportion of 0.1 to 30 weight % to the total solid components in the water-receptive layer.

4. The heat-sensitive lithographic printing plate precursor as in claim 2, wherein the hydrophilic resin is a hydroxyalkyl acrylate homopolymer, a hydroxyalkyl acrylate copolymer, a hydroxyalkyl methacrylate homopolymer or a hydroxyalkyl methacrylate copolymer.

5. The heat-sensitive lithographic printing plate precursor as in claim 1, wherein the water-receptive layer has a thickness of from 0.1 μm to 3 μm .

6. The heat-sensitive lithographic printing plate precursor as in claim 1, wherein the solvent capable of dissolving the organic high molecular component is selected from the group consisting of alcohols, ethers, ketones, esters, amides, γ -butyrolactone, methyl lactone and ethyl lactone.